UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,910	08/06/2003	Woon-Song Baik	K-0528	7365

34610 7590 02/22/2008 KED & ASSOCIATES, LLP P.O. Box 221200 Chantilly, VA 20153-1200	

EXAMINER
LEVITAN, DMITRY

ART UNIT	PAPER NUMBER
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/634,910	BAIK, WOON-SONG
	Examiner	Art Unit	
	Dmitry Levitan	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _22 January 2008_.

2a)☐ This action is **FINAL**.　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1,2,5-19,21 and 22_ is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1,2,5-19,21 and 22_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _22 January 2008_ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

Amendment, filed 1/22/08, has been entered. Claims 1, 2, 5-19, 21 and 22 remain pending.

Drawings

1.   The drawings were received on 8/06/07. These drawings are not acceptable.

2.   Path 'b' shown on Fig. 7 is unclear, as it does not properly show the connection between mobile terminal 30 and agent 710, as the elements of the path are not identified.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

1.   The disclosure is objected to because of the following informalities:

Unclear text on page 23, [0071], which is directed to the connection between agent 710 and the

mobile subscriber 30, which is shown as connection "b" on Fig. 7. The connections of agent 710

to other elements of the system are unclear. It is unclear if Path/connection '1' of Fig. 7 is a

direct connection between 720 and 710 or these elements are connected through Internet 20.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2.   Claims 1, 2, 5-19, 21 and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing

to comply with the written description requirement. The claim(s) contains subject matter which

was not described in the specification in such a way as to reasonably convey to one skilled in the

relevant art that the inventor(s), at the time the application was filed, had possession of the

claimed invention.

Claims 1 and 19 proposed limitations are directed to "a plurality of combinations of

packet-pattern attributes, each combination assigned a different security classification".

The related portion of the specification, Table 2 and [0048]-[0051], teaches using IPSec

security parameter but does not teach using each combination assigned different security

. classification.

3.   Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

Claim 14 limitations, directed to "static information" are unclear, as it is not understood what information is considered static and what is not.

Claim Rejections - 35 USC § 103

4.   Claims 1, 2, 5-19, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uskela (US 6,980,512) in view of Puuskari (2002/0032800).

5.   Regarding claims 1, 11, 19, 21 and 22, Uskela teaches a method for controlling a packet call in a mobile communication system (mobile system, shown on Fig. 1 and 4:44-5:30, wherein GGSN 7 performs screening/filtering for packets directed to the mobile user 1), comprising:

registering filtering information for storage in a database, the packet call filtering information including packet pattern attributes, including security attributes (storing in a screening list for subscribers to screen/filter the calls received from external terminals 5 according to connection point identifiers, CEI; including cipherkey of IPSEC protocol, as shown on Fig. 2 and 5:51-6:25);

if a packet addressed to the subscriber as a destination is received, determining whether to set the call connection for the received packet of a call based on a comparison of attribute information of the received packet and the registered call filtering information (determining on establishing a connection for the received call or deny it, based on the comparison of CEI of the received packet with CEI of the screening list, as shown on Fig. 2 and 5:52-6:24),

activating one of a rejection filter or a permission filter based on information stored in the

packet filtering information (accepting or rejecting packet based on the screening list tag

indication to allow or deny connections to certain endpoints, as disclosed on 2:45-50) and

setting the call according to the determination step above (performing CEI

check/matching with the screening list, including the tag, and packet acceptance or rejection

according to steps S103-S106 on Fig. 2).

Uskela does not teach using filtering information comprising a combination of attributes,

including different security and different arrangements.

Puuskari teaches implementing filters, based on a predetermined set of parameters to

identify packets or data flows, as disclosed on [0007], including Secure Parameter Index, as

disclosed on [0015].

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to add using filtering information comprising a combination of attributes, including

different security and different arrangements of Puuskari to the system of Uskela to improve the

system security and authentication to protect the system against attacks 6:15-25.

In addition, regarding claim 19, Uskela teaches an apparatus for controlling a packet

terminating call in a mobile communication system (GGSN 7, as shown on Fig. 1 and 4:44-5:5),

comprising:

a database which stores routing information and filtering information of a protocol data

unit for a packet radio service (memory of GGSN to store the screening list 5:14-31, which

comprises routing and filtering information as shown in example 7:37-54);

a terminating call control section which controls a terminating call setting for the protocol

data unit based on the routing information and the filtering information (portion of GGSN to

perform call termination according to the process, shown on Fig. 3 and 6:61-7:54);

a message processing section which performs an inquiry and/or update of the filtering

information based on an inquiry message and/or update message of the filtering information

(portion of GGSN performing inquiry for records at step S205, shown on Fig. 3 and 7:2-10); and

an Internet protocol processing section which processes the protocol data unit and

performs the terminating call setting procedure under control of the terminating call control

section (portion of GGSN performing communication with Internet, as disclosed on 7:16-54).

6.   Regarding claim 2, Uskela teaches call screening list to comprise information on

activating the screen list, as establishing detection points for received/transmitted packets, as

internetworking process between the GGSN and IP, wherein the detection point activate/start

interrogation process for a subnetwork, comprising several addresses 6:61-7:36, as shown in

example 7:37-53.

7.   Regarding claims 5 and 6, Uskela teaches call screening list to comprise the received

packets CEI, including IP addresses, port numbers and other information identifying the packet

source, as the CEI of a packet is inherently located in the header of the packet, wherein the CEI

packet information is inherently indicated by a known pattern, 5:66-6:25.

8.   Regarding claim 14, Uskela teaches GGSN node comprising the packet screening list,

according to static information 5:1-37 and 5:51-55.

9.   Regarding claim 15, Uskela teaches receiving a packet from a mobile user, identifying

the packet CEI and using the CEI of the packet to register the packet screening list information

based on the received packet, as shown on Fig. 3 and 6:61-7:54.

10.   Regarding claims 16 and 18, Uskela teaches performing screening for uplink packets in

the mobile terminal to avoid air time charges 5:14-24 and propagating the screening list across

the network. Therefore, the screening list, created in dynamic process of Fig. 3 and 6:1-7:54, as a

result of inquiry of the mobile unit and subsequent update/creation of the screening list, is

transferred to the mobile unit.

        In addition, regarding claim 18, Uskela teaches strong authentication for the system due

to the charging involved 6:21-24, therefore authenticating the mobile subscriber in the system.

11.   Regarding claims 8, 12 and 13, Puuskari teaches using a wireless system, comprising

GGSN implementing filter for packets, based on the Type of service (IPv4), connection type

(IPv6) and traffic class field (IPv6), as disclosed in [0007] and [0008].

12.   Regarding claim 7, Uskela in view of Puuskari substantially teaches the limitations of the

claim (see the parent claims rejection above).

In addition, Uskela teaches using the source address information for SEI 6:14-24, including use

of subnetwork comprising a plurality of IP addresses 7:30-35, identified by masks as shown in

example 36-54 for the packets transmitted from the mobile unit.

Uskela in view of Puuskari does not teach using subnet mask for the packets directed to the

mobile unit.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to add using subnet mask for the packets directed to the mobile unit to the system of

Uskela in view of Puuskari to improve the system operation in the other direction of the

communication by excluding packets from particular addresses.

13.   Regarding claims 9 and 10, Uskela in view of Puuskari substantially teaches the

limitations of the claim (see the parent claims rejection above).

In addition, Uskela teaches identifying the packet destination and source ports for the screening

list 6:14-18 and using a range of addresses for the screening list profile 7:37-54.

Uskela in view of Puuskari does not teach using ranges to indicate destination and source

ports in the screening list.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to add using ranges to indicate destination and source ports in the screening list to the

system of Uskela in view of Puuskari to save memory in the system and simplify the system

operation with the screening list.

14.   Regarding claim 17, Uskela in view of Puuskari substantially teaches the limitations of

the claim (see the parent claims and claim 15 rejection above).

In addition, Uskela teaches authenticating Internet subscriber 6:18-24.

Uskela in view of Puuskari does not teach using dynamic registration procedure of Fig. 3 and

6:61-7:54 for the packets directed to the mobile unit.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to add using dynamic registration procedure for the packets directed to the mobile unit

to the system of Uskela in view of Puuskari to improve the system operation in the other

direction of the communication by excluding packets from particular addresses.

Response to Arguments

Applicant's arguments filed 1/22/08 have been fully considered but they are not persuasive.

On pages 10 and 11 of the Response, Applicant argues that Claims 1 and 19 proposed limitations

are directed to "a plurality of combinations of packet-pattern attributes, each combination

assigned a different security classification" are supported by the specification, as filed.

Examiner respectfully disagrees.

Table 2 and corresponding text on [46]-[51] are directed to three valid combinations, wherein

Security Parameter Index is included only in one type of the three combinations and does not

indicated different security classification, as claimed.

Security Parameter Index, as originally disclosed, is one of call filter attributes, without any

indication of whether or not a PDU was transmitted with encryption in the disclosure.

On page 12 of the Response. Applicant argues that claim 14 limitation "static information" is

clear, because of the mentioning of static information in disclosure [0042] and should be

interpreted as information for existing subscribers.

Examiner respectfully disagrees.

"Static information" is a general term and is not limited to the cited portion of the disclosure, as indicated by Applicant. In addition, the cited portion of the text does not support Applicants interpretation of the static information as information for existing customers.

Claim 14 limitations comprise no information on what information is considered static and what is not. Claim 14 is rejected as being indefinite.

Applicant's arguments with respect to claims 1, 2, 5-19, 21 and 22 have been considered but are moot in view of the new ground(s) of rejection, necessitated by the amendment.

On page 15 of the Response, Applicant argues that Fig. 7 and corresponding text on [71] clearly identifies connection between serving node and the agent.

Examiner respectfully disagrees.

Fig. 7 and the text on [71], as amended, are unclear, because Fig. 7 connections, shown as "b" or "1" are not understood. as the connection "b", between mobile terminal 30 and agent 710 implies bypassing GPRS network and GGSN element. in comparison with connection "a" comprising these elements, is not explained in the disclosure.

Connection '1' of Fig. 7, between internet host 720 and agent 710, also is not explained in the disclosure.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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